invention will become increasingly apparent by reference to the following embodiments.--

Please replace the paragraph beginning at page 13, line 1, with the following paragraph.

--The present invention provides a vaccine that protects equids against *Sarcocystis neurona*. In a preferred embodiment, the vaccine consists of a 16 (±4) kDa antigen and/or 30 (±4) kDa antigen in a subunit vaccine. Preferably, the 16 (±4) kDa antigen and/or 30 (±4) kDa antigen are produced in a recombinant bacterium or eukaryote expression vector which produces the proteins which are then isolated to make the vaccine. In another embodiment of the vaccine, the vaccine is a DNA vaccine that comprises a recombinant DNA molecule, preferably in a plasmid, that comprises DNA encoding all or part of the 16 (±4) kDa antigen and/or 30 (±4) kDa antigen. In another embodiment of the vaccine, the recombinant DNA is inserted into a virus vector to provide a live vaccine which is a recombinant DNA virus. In U.S. Patent 6,153,394 to Mansfield *et al.*, which is hereby incorporated herein by reference, it was disclosed that *Sarcocystis neurona* possesses two unique antigens, a 16 (±4) antigen and a 30 (±4) kDa antigen. These antigens do not react with antibodies from other

Sarcocystis spp. Thus, these antigens are useful for producing vaccines that protect equids against *Sarcocystis neurona*.--

Please replace the paragraph beginning at page 29, line 13, with the following paragraph.

--Therefore, in a Western blot embodiment consisting of *Sarcocystis neurona* antigens resolved by gel electrophoresis, a biological sample from a vaccinated equid would contain antibodies that bind only with the 16 (±4) antigen and 30 (±4) kDa antigen whereas a sample from an equid infected with, or exposed to, *Sarcocystis neurona* would contain antibodies that bind with additional *Sarcocystis neurona* antigens. The equine antibodies that are bound are identified by treating the blot with labeled antibodies against equine antibodies. Preferably, the label is selected from the group consisting of alkaline phosphatase, horseradish peroxidase, fluorescent compounds, luminescent compounds, colloidal gold, and magnetic particles. Methods for preparing and analyzing Western blots are well known in the art. In a preferred embodiment, the Western blot is pretreated with non-equine antibodies against a *Sarcocystis* sp. other than *Sarcocystis neurona* wherein the pretreatment prevents binding of equine